

## **CITY OF BURBANK**

### **ELECTRICAL ENGINEERING ASSISTANT**

#### **DEFINITION**

Under supervision, to perform entry level professional electrical engineering work in a public utility; and to do related work as required.

#### **ESSENTIAL FUNCTIONS**

Makes detail design and construction drawings for rebuilding or adding to electrical generation, transmission or distribution facilities; prepares specifications and detailed material lists for rebuilding or adding to electrical power system facilities; initiates authorization and agreements for joint use of electrical distribution poles and related equipment; performs field work such as inspection of the condition and location of power poles, primary and secondary lines, transformer and other types of electrical equipment, inspection of electric line extension and replacement work, and checks field conditions and the progress of electrical construction; investigates transformer loads of industrial, commercial and residential areas and determines overloaded transformers; investigates complaints concerning low lines, lines crossing private property and related problems; performs elementary system load flow, stability and short circuit studies; prepares calculations for transmission and distribution system relay settings and voltage regulation problems; performs studies of alternative approaches to additions to electric power system; directs the preparation of data for reports to governmental and industrial agencies and maintains records and charts of system load growth; prepares calculations and charts relating to utility rate studies and graphs for analysis of operations, load, flow, and loss studies; performs drafting work; and prepares records and reports; drives on City business.

#### **MINIMUM QUALIFICATIONS**

##### **Employment Standards:**

- Knowledge of - principles of electricity, physics and mathematics; electrical drafting methods and equipment; the elementary characteristics of transformers and transmission lines.
- Skill in - drafting and engineering related drawing.
- Ability to - anticipate overloaded conditions; use mathematical tables, understand technical graphs, charts, legal property descriptions, engineering records and maps; do drafting and prepare maps and graphs; read wiring diagrams; follow directions and prepare accurate reports; utilize computers in the performance of complex calculations; establish and maintain effective working relationships with supervisors, fellow employees, and the public.

**Education/Training:** A B.S. Degree in Electrical Engineering from an accredited college or university in Electrical Engineering. Note: A Bachelor's Degree in an engineering or science field other than electrical, but with upper class course work in electrical engineering, may be qualifying. College seniors are eligible to apply, however, appointment cannot be made until proof of graduation from a school of engineering with a degree in engineering is submitted. Registration as an Electrical Engineer may be substituted for the education requirement.

**License & Certificates:** A valid California Class "C" driver's license or equivalent at time of appointment.

#### **SUPPLEMENTAL INFORMATION**

**Desirable Qualifications:** Proficiency in AutoCAD and Certification as an Engineer-in-Training by California.